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1991

Nebraska Summary: S125 Massey Ferguson 3670

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SUMMARY OF OECD TESTS 1364 & 1365—NEBRASKA SUMMARY 125

MASSEY FERGUSON 3670 DYNASHIFT DIESEL (2WD & FWA)

32 SPEED

Location of Test: Groupement D'Antony, Parc de Tourvoie. BP 121 92185 Antony, France

Dates of Test: October to December, 1991

Manufacturer: MASSEY FERGUSON S.A. Avenue Blaise Pascal, BP 307 60026 Beauvais, France

FUEL AND OIL: Fuel No. 2 Diesel Cetane No. NA Specific gravity converted to 60°/60°F (15°/15°C) 0.851 Fuel weight 7.10 lbs/gal (0.849 kg/l) Oil SAE 10W30 Oil consumption for 10 hours NA Transmission and hydraulic lubricant B.P. Terrac Manager SAE 10W30 Front Axle lubricant B.P. Terrac Manager SAE 10W30

ENGINE: Make Valmet Diesel Type six cylinder vertical with turbocharger Serial No. A 1557 Crankshaft lengthwise Rated engine speed 2200 Bore and stroke 4.25" × 4.724" (108 mm × 120 mm) Compression ratio 16.5 to 1 Displacement 402 cu in (6590 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements and aspirator Oil filter two full flow cartridges Oil cooler engine coolant heat exchanger for crankcase oil Fuel filter two paper elements Muffler underhood Exhaust vertical Cooling medium temperature control thermostat and variable speed fan

CHASSIS: Type 2WD and FWA Serial No. S 176 128 Tread width rear 73.7" (1871 mm) to 83.7" (2125 mm) front 2WD - 60.7" (1543 mm) to 91.9" (2333 mm) FWA - 66.4" (1686 mm) to 85.6" (2174 mm) Wheel base 115.4" (2930 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio with partial (4) range operator controlled powershift Nominal travel speeds mph (km/h) first 1.58 (2.54) second 1.85 (2.97) third 2.18 (3.51) fourth 2.39 (3.85) fifth 2.55 (4.11) sixth 2.80 (4.51) seventh 3.31 (5.32) eighth 3.42 (5.50) ninth 3.87 (6.23) tenth 4.00 (6.44) eleventh 4.65 (7.49) twelfth 4.72 (7.60), thirteenth 5.20 (8.36) fourteenth 5.45 (8.77) fifteenth 5.53 (8.90) sixteenth 6.08 (9.79) seventeenth 6.43 (10.35) eighteenth 7.18 (11.55) nineteenth 7.53 (12.11) twentieth 7.89 (12.69) twenty-first 8.40 (13.52) twenty-second 9.23 (14.85) twenty-third 10.89 (17.53) twenty-fourth 11.26 (18.13) twenty-fifth 12.75 (20.52) twenty-sixth 13.18 (21.22) twenty-seventh 15.33 (24.67) twenty-eighth 15.56 (25.04) twenty-ninth 17.95 (28.88) thirtieth 18.22 (29.31) thirty-first 21.18 (34.09) thirty-second 24.79 (39.90) reverse 1.55 (2.49), 1.81 (2.91), 2.13 (3.43), 2.35 (3.77), 2.50 (4.02), 2.74 (4.42), 3.24 (5.21), 3.35 (5.39), 3.79 (6.10), 3.92 (6.31), 4.56 (7.34), 4.63 (7.45), 5.09 (8.19), 5.34 (8.59), 5.45 (8.72), 5.96 (9.59), 6.30 (10.14), 7.03 (11.32), 7.37 (11.86), 7.72 (12.43), 8.23 (13.25), 9.04 (14.55), 10.67 (17.17), 11.03 (17.76), 12.49 (20.10), 12.92 (20.79), 15.02 (24.17), 15.25 (24.53), 17.58 (28.29), 17.84 (28.72), 20.75

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Fuel Consumption			Mean Atmospheric Conditions
		Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1053 rpm)					
152.7 (113.9)	2202	8.23 (31.15)	0.383 (0.233)	18.58 (3.66)	
Maximum Power (2 Hours)					
154.0 (114.9)	2150	8.20 (31.03)	0.378 (0.230)	18.78 (3.70)	
Standard Power Take-off Speed (1003 rpm)					
153.9 (114.8)	2096	8.10 (30.67)	0.373 (0.227)	19.00 (3.74)	Air temperature
VARYING POWER AND FUEL CONSUMPTION					
152.7 (113.9)	2202	8.23 (31.15)	0.383 (0.233)	18.58 (3.66)	70°F (21°C)
133.0 (99.2)	2248	7.31 (27.69)	0.390 (0.237)	18.19 (3.58)	Relative humidity
100.8 (75.2)	2277	5.92 (22.42)	0.418 (0.254)	17.02 (3.35)	50%
67.7 (50.5)	2308	4.57 (17.30)	0.478 (0.291)	14.82 (2.92)	Barometer
34.4 (25.6)	2330	3.20 (12.12)	0.661 (0.402)	10.74 (2.12)	29.8" Hg (101.0 kPa)
.....	2350	1.92 (7.27)	
.....			

Maximum Torque 468.6 lb. ft (635.3 Nm) at 1426 RPM
Maximum Torque Rise 28.6%

DRAWBAR PERFORMANCE

FUEL CONSUMPTION CHARACTERISTICS

Power Hp (kW)	Drawbar pull (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—20th (2LA) Gear									
139.7 (104.2)	7245 (32.2)	7.23 (11.64)	2089	4	0.413 (0.251)	17.21 (3.39)	176 (80)	46 (8)	29.8 (101.0)
75% of Pull at Maximum Power—20th (2LA) Gear									
107.4 (80.1)	5060 (22.5)	7.96 (12.80)	2266	3	0.454 (0.276)	15.63 (3.08)	176 (80)	46 (8)	29.8 (101.0)
50% of Pull at Maximum Power—20th (2LA) Gear									
73.4 (54.7)	3370 (15.0)	8.17 (13.14)	2303	2	0.516 (0.314)	13.76 (2.71)	174 (79)	46 (8)	29.8 (101.0)
75% of Pull at Reduced Engine Speed—22nd (2LB) Gear									
107.5 (80.2)	5045 (22.4)	7.99 (12.86)	1943	3	0.421 (0.256)	16.90 (3.33)	176 (80)	46 (8)	29.8 (101.0)
50% of Pull at Reduced Engine Speed—22nd (2LB) Gear									
73.6 (54.9)	3380 (15.0)	8.17 (13.14)	1968	2	0.470 (0.286)	15.13 (2.98)	176 (80)	46 (8)	29.8 (101.0)

MAXIMUM POWER IN SELECTED GEARS

Power Hp (kW)	Drawbar pull (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
8th (3TA) Gear									
98.8 (73.7)	11755 (52.2)	3.15 (5.08)	2279	12	0.483 (0.294)	14.67 (2.89)	180 (82)	46 (8)	29.8 (101.0)
9th (2TD) Gear									
111.6 (83.2)	11580 (51.5)	3.61 (5.82)	2262	10	0.477 (0.290)	14.87 (2.93)	178 (81)	46 (8)	29.8 (101.0)
10th (3TB) Gear									
115.7 (86.3)	11600 (51.6)	3.74 (6.01)	2263	10	0.464 (0.282)	15.33 (3.02)	181 (83)	46 (8)	29.8 (101.0)
11th (4TA) Gear									
131.8 (98.3)	11310 (50.3)	4.37 (7.03)	2238	8	0.449 (0.273)	15.79 (3.11)	180 (82)	46 (8)	29.8 (101.0)
12th (3TC) Gear									
132.6 (98.9)	11265 (50.1)	4.41 (7.11)	2219	8	0.449 (0.273)	15.84 (3.12)	180 (82)	46 (8)	29.8 (101.0)
13th (1LA) Gear									
138.0 (102.9)	10950 (48.7)	4.73 (7.61)	2153	7	0.432 (0.263)	16.45 (3.24)	176 (80)	46 (8)	29.8 (101.0)
14th (4TB) Gear									
136.4 (101.7)	10275 (45.7)	4.98 (8.02)	2137	6	0.431 (0.262)	16.50 (3.25)	178 (81)	46 (8)	29.8 (101.0)
15th (3TD) Gear									
136.2 (101.6)	10115 (45.0)	5.05 (8.12)	2127	6	0.432 (0.263)	16.45 (3.24)	176 (80)	46 (8)	29.8 (101.0)
16th (1LB) Gear									
138.7 (103.4)	9325 (41.5)	5.58 (8.98)	2122	5	0.419 (0.255)	16.90 (3.33)	178 (81)	46 (8)	29.8 (101.0)
17th (4TC) Gear									
135.2 (100.8)	8610 (38.3)	5.89 (9.48)	2108	5	0.429 (0.261)	16.55 (3.26)	176 (80)	46 (8)	29.8 (101.0)
18th (1LC) Gear									
138.1 (103.0)	7835 (34.9)	6.61 (10.63)	2104	4	0.422 (0.257)	16.80 (3.31)	180 (82)	46 (8)	29.8 (101.0)
19th (4TD) Gear									
134.8 (100.5)	7240 (32.2)	6.98 (11.23)	2110	4	0.429 (0.261)	16.55 (3.26)	178 (81)	46 (8)	29.8 (101.0)
20th (2LA) Gear									
139.7 (104.2)	7245 (32.2)	7.23 (11.64)	2089	4	0.413 (0.251)	17.21 (3.39)	176 (80)	46 (8)	29.8 (101.0)
21st (1LD) Gear									
138.7 (103.4)	6775 (30.1)	7.68 (12.35)	2074	3	0.416 (0.253)	17.11 (3.37)	178 (81)	46 (8)	29.8 (101.0)
22nd (2LB) Gear									
137.1 (102.2)	6040 (26.9)	8.51 (13.70)	2086	3	0.422 (0.257)	16.85 (3.32)	176 (80)	46 (8)	29.8 (101.0)
23rd (2LC) Gear									
136.1 (101.5)	5100 (22.7)	10.01 (16.11)	2061	3	0.422 (0.257)	16.80 (3.31)	176 (80)	46 (8)	29.8 (101.0)

TRACTOR SOUND LEVEL WITH CAB	2WD dB(A)	FWA dB(A)
Gear closest to 4.7 mph (7.5 km/h) 11th (4TA) gear	75.0	75.0
Maximum sound level	76.0	77.0
Transport speed—no load 32nd (3LD) gear	72.0	—
Bystander in 32nd (3LD) gear	84.0	84.0

Tested Without Ballast			
TIRES AND WEIGHT		Front Wheel Assist	2WD
Rear Tires	—No., size, ply & psi (kPa)	Two 20.8-42; 10; 16 (110)	Two 20.8-42; 10; 16 (110)
Front Tires	—No., size, ply & psi (kPa)	Two 16.9-30; 8; 17 (120)	Two 14L-16.1; 6; 28 (200)
Height of Drawbar		25.6 in (650 mm)	37.5 in (950 mm)
Static Weight with Operator—Rear		8940 lb (4055 kg)	8805 lb (3995 kg)
—Front		5720 lb (2595 kg)	4885 lb (2215 kg)
—Total		14660 lb (6650 kg)	13690 lb (6210 kg)

(33.39), 24.29 (39.08) **Clutch** dry single disc operated by foot pedal **Brakes** single wet disc hydraulically actuated by two foot pedals which can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 1993 engine rpm and 1000 rpm at 2090 engine rpm **Unladen tractor mass** 2WD - 13515 lb (6130 kg), FWA - 14530 lb (6590 kg)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD Code II test procedures. The performance figures on this summary were taken from a test conducted under the OECD Code II restricted standard test code procedure. A speed sensor automatically disengages the front drive axle at speeds above 9 mph (15 km/h).

We, the undersigned, certify that this is a true summary of data from OECD Report Nos. **1364 & 1365**, Nebraska Summary 125, January 29, 1993.

LOUIS I. LEVITICUS
Engineer-in-Charge

L. L. BASHFORD
R. D. GRISSE
K. VON BARGEN
Board of Tractor Test Engineers

The following performance figures apply to the tractor equipped with a Front Drive Axle.

DRAWBAR PERFORMANCE **FUEL CONSUMPTION CHARACTERISTICS** **(Front Drive Engaged)**

Power Hp (kW)	Drawbar pull (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—18th (1LC) Gear									
139.7 (104.2)	7760 (34.5)	6.75 (10.87)	2121	3	0.422 (0.257)	16.85 (3.32)	172 (78)	45 (7)	30.4 (102.8)
75% of Pull at Maximum Power—18th (1LC) Gear									
106.3 (79.3)	5445 (24.2)	7.32 (11.78)	2267	2	0.462 (0.281)	15.33 (3.02)	174 (79)	50 (10)	30.3 (102.5)
50% of Pull at Maximum Power—18th (1LC) Gear									
71.9 (53.6)	3600 (16.0)	7.49 (12.05)	2297	1	0.570 (0.347)	12.49 (2.46)	174 (79)	50 (10)	30.3 (102.5)
75% of Pull at Reduced Engine Speed—20th (2LA) Gear									
105.8 (78.9)	5415 (24.1)	7.33 (11.79)	2064	2	0.422 (0.257)	16.85 (3.32)	174 (79)	50 (10)	30.3 (102.5)
50% of Pull at Reduced Engine Speed—20th (2LA) Gear									
71.5 (53.3)	3585 (15.9)	7.48 (12.04)	2091	1	0.498 (0.303)	14.26 (2.81)	176 (80)	50 (10)	30.3 (102.5)
MAXIMUM POWER IN SELECTED GEARS									
6th (2TB) Gear									
88.0 (65.6)	13375 (59.5)	2.47 (3.97)	2281	15	0.526 (0.320)	13.55 (2.67)	174 (79)	45 (7)	30.4 (102.8)
7th (2TC) Gear									
107.5 (80.2)	13195 (58.7)	3.06 (4.92)	2262	11	0.482 (0.293)	14.82 (2.92)	174 (79)	45 (7)	30.4 (102.8)
8th (3TA) Gear									
110.9 (82.7)	13285 (59.1)	3.13 (5.04)	2259	11	0.478 (0.291)	14.92 (2.94)	174 (79)	45 (7)	30.4 (102.8)
9th (2TD) Gear									
123.8 (92.4)	13250 (58.9)	3.50 (5.64)	2238	11	0.473 (0.288)	15.08 (2.97)	174 (79)	45 (7)	30.4 (102.8)
10th (3TB) Gear									
128.5 (95.8)	13195 (58.7)	3.65 (5.87)	2226	10	0.462 (0.281)	15.48 (3.05)	174 (79)	45 (7)	30.4 (102.8)
11th (4TA) Gear									
136.5 (101.8)	11715 (52.1)	4.37 (7.03)	2187	6	0.432 (0.263)	16.45 (3.24)	172 (78)	45 (7)	30.4 (102.8)
12th (3TC) Gear									
136.0 (101.4)	11555 (51.4)	4.41 (7.10)	2166	6	0.434 (0.264)	16.40 (3.23)	172 (78)	45 (7)	30.4 (102.8)
13th (1LA) Gear									
137.6 (102.6)	10635 (47.3)	4.85 (7.81)	2150	5	0.427 (0.260)	16.60 (3.27)	172 (78)	45 (7)	30.4 (102.8)
14th (4TB) Gear									
138.4 (103.2)	10185 (45.3)	5.09 (8.19)	2140	4	0.424 (0.258)	16.70 (3.29)	172 (78)	45 (7)	30.4 (102.8)
15th (3TD) Gear									
136.8 (102.0)	9950 (44.3)	5.16 (8.30)	2134	4	0.427 (0.260)	16.60 (3.27)	169 (76)	45 (7)	30.4 (102.8)
16th (1LB) Gear									
138.9 (103.6)	9160 (40.8)	5.69 (9.15)	2127	4	0.421 (0.256)	16.85 (3.32)	174 (79)	45 (7)	30.4 (102.8)
17th (4TC) Gear									
136.8 (102.0)	8540 (38.0)	6.01 (9.67)	2114	3	0.427 (0.260)	16.60 (3.27)	174 (79)	45 (7)	30.4 (102.8)
18th (1LC) Gear									
139.7 (104.2)	7760 (34.5)	6.75 (10.87)	2121	3	0.422 (0.257)	16.85 (3.32)	172 (78)	45 (7)	30.4 (102.8)
19th (4TD) Gear									
136.0 (101.4)	7235 (32.2)	7.05 (11.34)	2104	2	0.431 (0.262)	16.50 (3.25)	169 (76)	45 (7)	30.4 (102.8)
20th (2LA) Gear									
138.9 (103.5)	7000 (31.2)	7.45 (11.99)	2108	2	0.421 (0.256)	16.90 (3.33)	174 (79)	45 (7)	30.4 (102.8)
21st (1LD) Gear									
137.3 (102.4)	6540 (29.1)	7.87 (12.67)	2097	2	0.424 (0.258)	16.75 (3.30)	171 (77)	45 (7)	30.4 (102.8)
22nd (2LB) Gear									
138.4 (103.2)	5980 (26.6)	8.68 (13.97)	2097	2	0.421 (0.256)	16.85 (3.32)	172 (78)	45 (7)	30.4 (102.8)
23rd (2LC) Gear									
135.3 (100.9)	5015 (22.3)	10.11 (16.27)	2088	3	0.427 (0.260)	16.60 (3.27)	176 (80)	45 (7)	30.4 (102.8)

THREE POINT HITCH PERFORMANCE (OECD STATIC TEST)

CATEGORY: II

Quick Attach: None

Maximum Force Exerted Through Whole Range:

10990 lbs (48.9 kN)

i) Opening pressure of relief valve:

NA

Sustained pressure of the open relief valve:

2755 psi (190 bar)

ii) Pump delivery rate at minimum pressure:

14.5 GPM (55.0 l/min)

iii) Pump delivery rate at maximum hydraulic power:

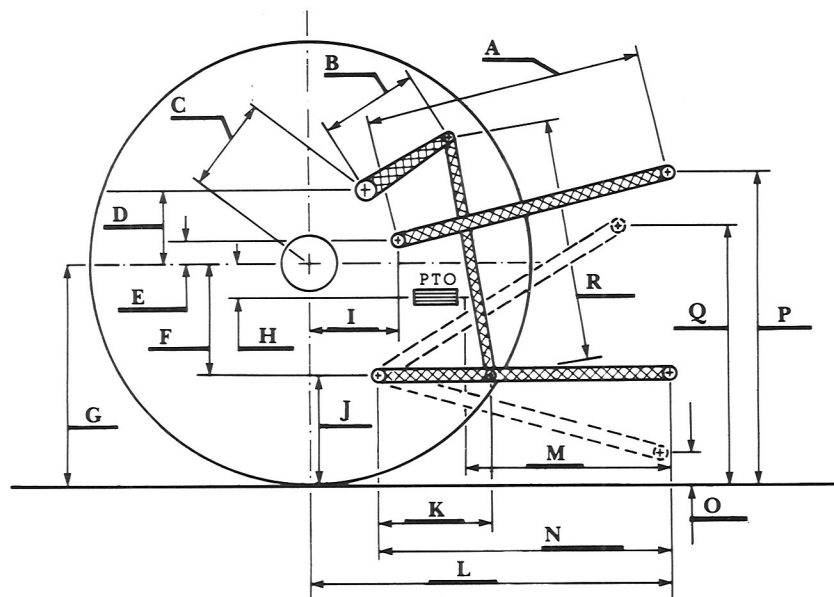
12.9 GPM (48.7 l/min)

Delivery pressure:

2480 psi (171 bar)

Power:

18.6 Hp (13.9 kW)



	inch	mm
A	31.1	790
B	14.3	362
C	18.5	470
D	17.0	432
E	7.0	179
F	11.8	300
G	36.2	920
H	6.0	153
I	16.9	428
J	24.4	620
K	21.6	548
L	47.2	1199
M	27.6	700
N	38.4	975
O	10.4	263
P	44.5	1130
Q	35.2	893
R	33.9	860

HITCH DIMENSIONS AS TESTED—NO LOAD